REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of remarks herewith.

I.   STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 8-13 are pending. Claims 8, 12 and 13 are independent and hereby amended. No new matter has been added. It is submitted that these claims, as originally presented, were in full compliance with the requirements of 35 U.S.C. §112. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II.   SUPPORT FOR AMENDMENT IN SPECIFICATION

Support for this amendment is provided throughout the Specification as originally filed and specifically at paragraphs [0023]-[0026] and [0093]-[0094] of Applicants' corresponding published application. By way of example and not limitation:

[0023] Next, a case in which fast forward playback is performed is considered. In the case of the fast forward playback, as shown in FIG. 5, it is necessary that, by tracking the FAT in the forward direction, the cluster address of the cluster in which the next data is recorded is detected, and data is read every several clusters (in the case of FIG. 5, every four clusters) in such a manner as to correspond to the fast forward speed.

[0024] The problem that occurs when fast forward playback is performed is that, because of the fast forward playback, the next cluster address must be searched for a plurality of times at a speed higher than that during normal playback. Furthermore, problems identical to those when the above-described normal playback is performed exist. Due to such reasons, when fast forward playback is to be performed, also, there is the problem in that a delay may occur in the reading of data.

[0025] Next, a case in which fast backward playback is performed is considered. When fast backward playback is to be is performed, as shown in FIG. 6, it is necessary that, by tracking the FAT in the reverse direction, the cluster address of the cluster in which the next data is recorded is detected, and data is read every several clusters (in the case of FIG. 6, every four clusters) in such a manner as to correspond to the fast backward speed.

[0026] The problem which occurs when fast backward playback is performed is caused by the fact

Frommer Lawrence & Haug LLP
745 Fifth Avenue
New York, NY 10151
212-588-0800
Customer Number 20999

Page 8 of 13

00652899

that the tracking of the FAT in the reverse direction is more difficult than the tracking of the FAT in the forward direction. For example, in order to track the cluster address CL5 in the forward direction from the cluster address CL3, it is only necessary to refer to the space of the FAT address 3. In comparison, in order to track the cluster address CL3 in the reverse direction from the cluster address CL5, it is necessary to search for each space of the FAT and to specify the FAT address at which the cluster address CL3 is recorded.

... ...

[0093] Next, a case in which fast forward playback is performed is considered. When fast forward playback is instructed, as indicated by the arrow in FIG. 11, the CPU 1 reads cluster addresses every several clusters of the file playback information in the forward direction from the top to the bottom, and notifies the read cluster addresses together with the read command to the reading section 9. The process for simply reading the cluster addresses every several clusters (in the case of FIG. 11, every four cluster addresses) from the file playback information in the forward direction from the top to the bottom in the manner described above is not a burden on the CPU 1. Therefore, the problems when the partial FAT described with reference to FIG. 5 is used do not occur.

[0094] Next, a case in which fast backward playback is performed is considered. When fast backward playback is instructed, as indicated by the arrow in FIG. 12, the CPU 1 reads cluster addresses every several clusters from the file playback information in the reverse direction from the bottom to the top, and notifies the read cluster addresses together with the read command to the reading section 9. Also, the process for simply reading the cluster addresses every several clusters (in the case of FIG. 12, every four cluster addresses) from the file playback information in the reverse direction from the bottom to the top in the manner described above is not a burden on the CPU 1. Therefore, the problems when the partial FAT described with reference to FIG. 6 is used does not occur.

III.   RESPONSE TO REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 8-13 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over JP 2000-276851 to Hirofumi (hereinafter, merely "Hirofumi") in view of U.S. Patent Application Publication No. 2003/0126390 A1 to Huang (hereinafter, merely "Huang").

Claim 8 has been amended to incorporate the features of claims 10 and 11, and other features as well. Specifically, claim 8 recites, *inter alia*:

> "…wherein, during fast forward playback and fast backward playback, said indication means reads said unit recording area addresses recorded in said second table **every predetermined number of the unit recording area addresses**, and indicates the unit recording area addresses to said reading means…" (Emphasis added)

Applicants submit that neither Hirofumi nor Huang, taken alone or in combination, that would teach or suggest the above-identified features of claim 8. Specifically,

neither of the references used as a basis for rejection describes <u>during fast forward playback and</u>

<u>fast backward playback, said indication means reads said unit recording area addresses recorded</u>

<u>in said second table **every predetermined number of the unit recording area addresses**, and</u>

<u>indicates the unit recording area addresses to said reading means</u>, as recited in claim 8.

Specifically, the Office Action (see page 5) asserts that Hirofumi teaches fast

forwarding reproduction and review reproduction, and refers to paragraph [0041], which is

reproduced as follow:

> [0041] In the case of the above-mentioned special reproduction mode, by this. By the basis of the bidirectional list memorized by said RAM11, <u>at the time of fast forwarding reproduction. The cluster number of a skip place is searched according to a forward direction list, at the time of review reproduction, the cluster number of a skip place is searched according to an opposite direction list, and the record data of the cluster of a skip place becomes refreshable in an instant</u>.

Thus, Applicants submit that Hirofumi describes that at the time of fast

forwarding reproduction (or review reproduction), the cluster number of a skip place is searched

according to a forward direction list (or a opposite direction list), but teaches nothing about

reading the unit recording area addresses every predetermined number of the unit recording area

addresses.

However, in the present invention, paragraphs [0023]-[0026] of Applicants'

corresponding published application describe the problem occurred in Hirofumi, and paragraphs

[0093]-[0094] describe performing the fast forward playback and fast backward playback, and

are reproduced as follow:

> [0023] <u>Next, a case in which fast forward playback is performed is considered</u>. In the case of the fast forward playback, as shown in FIG. 5, it is necessary that, by tracking the FAT in the forward direction, the cluster address of the cluster in which the next data is recorded is detected, and data is read every several clusters (in the case of FIG. 5, every four clusters) in such a manner as to correspond to the fast forward speed.

> [0024] <u>The problem that occurs when fast forward playback is performed</u> is that, because of the fast forward playback, the next cluster address must be searched for a plurality of times at a speed higher than that during normal playback. Furthermore, problems identical to those when the above-described normal playback is performed exist. Due to such reasons, when fast forward playback is to be performed, also, there is the problem in that a delay may occur in the reading of data.
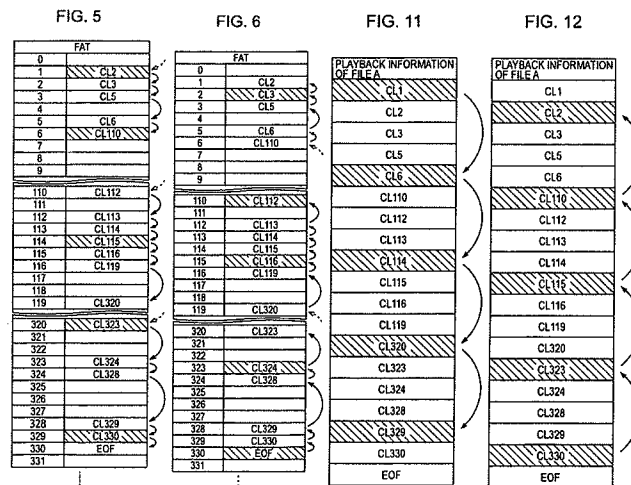
[0025] <u>Next, a case in which fast backward playback is performed is considered</u>. When fast backward playback is to be is performed, as shown in FIG. 6, it is necessary that, by tracking the FAT in the reverse direction, the cluster address of the cluster in which the next data is recorded is detected, and data is read every several clusters (in the case of FIG. 6, every four clusters) in such a manner as to correspond to the fast backward speed.

[0026] <u>The problem which occurs when fast backward playback is performed</u> is caused by the fact that the tracking of the FAT in the reverse direction is more difficult than the tracking of the FAT in the forward direction. For example, in order to track the cluster address CL5 in the forward direction from the cluster address CL3, it is only necessary to refer to the space of the FAT address 3. In comparison, in order to track the cluster address CL3 in the reverse direction from the cluster address CL5, it is necessary to search for each space of the FAT and to specify the FAT address at which the cluster address CL3 is recorded.

... ...

[0093] Next, a case in which fast forward playback is performed is considered. When fast forward playback is instructed, as indicated by the arrow in FIG. 11, the CPU 1 reads cluster addresses every several clusters of the file playback information in the forward direction from the top to the bottom, and notifies the read cluster addresses together with the read command to the reading section 9. <u>The process for simply reading the cluster addresses every several clusters (in the case of FIG. 11, every four cluster addresses) from the file playback information in the forward direction from the top to the bottom in the manner described above is not a burden on the CPU 1. Therefore, the problems when the partial FAT described with reference to FIG. 5 is used do not occur.</u>

[0094] Next, a case in which fast backward playback is performed is considered. When fast backward playback is instructed, as indicated by the arrow in FIG. 12, the CPU 1 reads cluster addresses every several clusters from the file playback information in the reverse direction from the bottom to the top, and notifies the read cluster addresses together with the read command to the reading section 9. Also, <u>the process for simply reading the cluster addresses every several clusters (in the case of FIG. 12, every four cluster addresses) from the file playback information in the reverse direction from the bottom to the top in the manner described above is not a burden on the CPU 1. Therefore, the problems when the partial FAT described with reference to FIG. 6 is used does not occur.</u>

FIG. 5   FIG. 6   FIG. 11   FIG. 12

Thus, in the present invention, as shown in Fig.11, the process for reading the cluster addresses every several clusters (every four cluster addresses in Fig.11) from the file playback information in the forward direction is not a burden on the CPU, so that the problems

described in FIG. 5 will not occur. And similarly, as shown in Fig.12, the process for reading the

cluster addresses every several clusters (every four cluster addresses in Fig.12) from the file

playback information in the reverse direction is not a burden on the CPU, so that the problems

described in FIG. 6 will not occur, either.

Thus, nothing has been found in Hirofumi that would teach or suggest <u>during fast</u>

<u>forward playback and fast backward playback, said indication means reads said unit recording</u>

<u>area addresses recorded in said second table</u> **every predetermined number of the unit**

recording area addresses, <u>and indicates the unit recording area addresses to said reading means,</u>

as recited in claim 8.

Furthermore, this deficiency of Hirofumi is not cured by the supplemental

teaching of Huang.

Therefore, Applicants submit that independent claim 8 is patentable.

For reasons similar to, or somewhat similar to, those described above with regard

to independent claim 8, independent claims 12-14 are also patentable.

IV.   DEPENDENT CLAIMS

The other claims are dependent from an independent claim, discussed above, and

are therefore believed patentable for at least the same reasons. Since each dependent claim is

also deemed to define an additional aspect of the invention, however, the individual

reconsideration of the patentability of each on its own merits is respectfully requested.

Similarly, because Applicants maintain that all claims are allowable for at least

the reasons presented hereinabove, in the interests of brevity, this response does not comment on

each and every comment made by the Examiner in the Office Action. This should not be taken

as acquiescence of the substance of those comments, and Applicants reserve the right to address
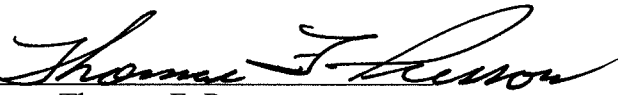
such comments.

CONCLUSION

In the event the Examiner disagrees with any of the statements appearing above

with respect to the disclosures in the cited reference, or references, it is respectfully requested

that the Examiner specifically indicate the portion, or portions, of the reference, or references,

providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any

overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the

claims in this application are patentable and Applicants respectfully request early passage to

issue of the present application.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicants

By _____
Thomas F. Presson
Reg. No. 41,442
(212) 588-0800